STATE OF CALIFORNIA GRAY DAVIS, GOVERNOR

# **SEISMIC SAFETY COMMISSION**

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### Seismic Safety Commission

# Minutes of Regular Meeting/Workshop

July 12, 2001

State Capitol, Room 444

Sacramento, California

# Members Present Members Absent

Donald O. Manning, Chairman Senator Richard Alarcon/Chris Modrzejewski

Daniel Shapiro, Vice Chairman Mark M. Church

Andrew Adelman Jeff Johnson

Jerry C. Chang

Bruce R. Clark Staff Present

William L. Gates Richard McCarthy

Lawrence T. Klein (arr. 9:20 a.m.) Karen Cogan

Douglas E. Mochizuki Robert Anderson

Stan Y. Moy (arr. 9:25 a.m.) Abby Browning

Linden T. Nishinaga Henry Sepulveda

Ashok S. Patwardhan (arr. 9:15 a.m.) Henry Reyes

Patricia Snyder Fred Turner

#### I. CALL TO ORDER/ROLL CALL

The meeting of the Seismic Safety Commission was called to order by Chairman Donald Manning at 9:00 a.m.

### II. CHAIRMAN'S REMARKS

Chairman Manning noted the terms of four commissioners expired in May, so unless the Commission receives word of their reappointment, this would be the last meeting for himself and Commissioners Chang, Johnson, and Snyder. Chairman Manning said he enjoyed his tenure on the Commission, and he praised the professionalism and dedication of the staff.

Commissioner Adelman thanked the outgoing commissioners for the guidance and help they provided to the new commissioners. He said the Commission will miss their depth of knowledge and experience.

Chairman Manning read a resolution honoring former Commissioner Scott Haggerty for his service on the Commission.

ACTION: Commissioner Shapiro made a motion, seconded by Commissioner Chang, that:

The Commission adopt the resolution honoring former Commissioner Haggerty.

\* Motion carried, 9 - 0 (Commissioners Klein, Moy, and Patwardhan absent during voting).

Chairman Manning noted the report of the Nominations Committee and election of new officers would take place after the Executive Director's Report.

III. APPROVAL OF MINUTES

June 14, 2001

ACTION: Commissioner Clark made a motion, seconded by Commissioner Mochizuki, that:

The Commission approve the minutes of the June 14 meeting.

Commissioner Chang drew attention to the sixth full paragraph on Page 8, next-to-last sentence. He suggested inserting "and recovery costs from earthquake damage" before "over the life of a building." Chairman Manning asked Commissioner Chang to provide the staff with this change in writing.

Commissioner Nishinaga proposed deleting the last sentence from the third full paragraph on Page 10.

Referring to the statistics in the middle of the first paragraph on Page 7, Commissioner Clark noted the figure "975" should be changed to "966."

Commissioners Clark and Mochizuki agreed to incorporate these changes in their motion.

\* Motion carried, 8 - 0 - 1 (Commissioner Shapiro abstaining; Commissioners Klein, Moy, and Patwardhan absent during voting).

IV. COMMITTEE REPORTS

There were no committee reports.

#### V. EXECUTIVE DIRECTOR'S REPORT

#### **Budget Status**

Executive Director Richard McCarthy explained that there was no budget report in this meeting agenda because the new fiscal year just began. He recommended that the Commission authorize the staff to work with the Budget and Planning Committee to develop a budget change proposal (BCP) for augmented funding next year. He noted Commissioner Patwardhan expressed concern at the last meeting regarding ensuring adequate staffing for committees, and the BCP can address that problem. Mr. McCarthy said an earlier version of this year's budget gave the Commission an additional \$38,000 for that purpose, but that amount will be cut to \$15,000 because of the across-the-board 2.5 percent cut in the general fund ordered by Governor Davis. He suggested that the staff and the budget committee evaluate the Commission's fiscal deficiencies and request additional funds in the BCP. Mr. McCarthy noted the Commission's five-year lease on office space will expire in fiscal year 2003, so the Commission will need to either renegotiate the lease or move. He recommended including some amount in the BCP to cover those anticipated cost increases. Mr. McCarthy said the BCP is due to the Department of Finance in mid-September.

ACTION: Commissioner Adelman made a motion, seconded by Commissioner Gates, that:

The Commission authorizes the staff and the Budget and Planning Committee to develop a budget change proposal to be submitted to the Department of Finance in September.

\* Motion carried, 9 - 0 (Commissioners Klein, Moy, and Patwardhan absent during voting).

# California Earthquake Loss Reduction Plan Revision

Mr. McCarthy reported that staff is working with the Office of Emergency Services (OES) on a draft letter for the Governor endorsing the *California Earthquake Loss Reduction Plan*. He said OES has agreed to co-sign a letter from the Commission asking for the Governor's support and signature. He added that more information will be available at the September meeting.

Commissioner Mochizuki asked about plans for distributing the revised edition of the *Plan*. Mr. McCarthy responded that the staff is compiling a list of recipients. He said OES budgeted \$5,000 for printing the document, and it is expected to be ready for distribution the first week of January.

Commissioner Snyder recommended showing the critically important initiatives in bold type.

### **Commissioner Contacts**

Commissioner Shapiro informed the Commission that he had been contacted by Ed Matsuda at BART to discuss a meeting with BART officials.

# VI. NOMINATIONS COMMITTEE

Commissioner Mochizuki reported that the Nominations Committee met on July 11. He said the committee proposes Commissioner Clark for chair and Commissioner Moy for vice-chair.

There were no other nominations.

ACTION: On behalf of the Nominations Committee, Commissioner Mochizuki recommended that:

The Commission elect Commissioner Bruce Clark chair and Commissioner Stan Moy vice-chair.

\* Motion carried, 10 - 0 (Commissioners Klein and Moy absent during voting).

Chairman Manning congratulated the new officers and presented the gavel to Chairman Clark.

# VIII. PRE-1973 HOSPITAL BUILDINGS WORKSHOP (Out of Order)

### Introduction

Chairman Clark welcomed commissioners, invited guests, and audience members to the Commission's workshop on SB 1953 implementation. He explained that SB 1953, the Hospital Facilities Seismic Safety Act, was sponsored by the Seismic Safety Commission and enacted by the Legislature in 1994. The bill expanded the 1973 Hospital Seismic Safety Act, which was amended in 1983, to set specific dates for compliance and retrofitting. SB 1953 required hospitals to submit engineering evaluations of all their facilities by January 1, 2001 and evaluations of nonstructural elements by January 1, 2002. The Act also required hospitals to retrofit their buildings to life safety levels by January 1, 2008, and to post-earthquake functionality levels by January 1, 2030.

Chairman Clark said the engineering evaluations submitted last January indicate that 966 buildings do not meet current life safety standards, and costs of repair and retrofit are estimated at \$10 billion or more. Many people have expressed concern that hospitals will not be able to meet the 2008 deadline.

Chairman Clark noted that during the past several years, there have been significant improvements in understanding hazards and risks. Major earthquakes in Northridge, Kobe, Turkey, Greece, Taiwan, and Seattle have produced a new base of information that has led to better hazard maps and improved information about strong motions. In addition, advances in medical technology and equipment have led to significant changes in the way medical services are provided.

Chairman Clark said the purpose of this workshop session on SB 1953 implementation is to address some of the policy issues facing California. He noted the Seismic Safety Commission plans to develop a series of findings that will be used as the basis for legislative positions and advice to the Governor and Legislature. Chairman Clark said some of the key issues to be discussed are whether current public policies are still valid, whether SPC-1 buildings should receive the highest priority in terms of legislation, whether engineering criteria used to evaluate structural components is consistent with the risk involved, whether delays in retrofit deadlines will result in unacceptable conditions, and, if the 2008 deadline is to be extended, whether SPC-1 buildings should be prioritized to ensure the most dangerous buildings are fixed first.

Commissioner Adelman noted another important issue is what will happen to hospitals that are unable to meet the SB 1953 deadlines. He expressed concern that hospital owners will convert some of these vulnerable buildings to clinics, thus transferring them from Office of Statewide Health Planning and Development (OSHPD) jurisdiction to local jurisdiction. He added that many local jurisdictions do not have the technical expertise or information to handle this responsibility.

#### VII. ANNUAL REPORT OF THE HOSPITAL BUILDING SAFETY BOARD

Mr. Trailer Martin, Chairman, Hospital Building Safety Board (HBSB), introduced Ms. Barbara Martinez, Acting Executive Director, HBSB. He presented the annual report to the Commission on the Board's activities. Mr. Martin observed that 2000 was a productive year. He said the HBSB held three quarterly meetings, but many committee meetings were curtailed due to funding problems.

Mr. Martin reviewed the accomplishments of the HBSB's standing committees. He reported that the Board Procedures Committee formalized election procedures and defined the role of consulting members. The Instrumentation Committee made recommendations to the California Strong Motion Instrumentation Program (SMIP) regarding hospital buildings to be instrumented, and there are now 26 instrumented hospitals throughout the state. The Code 2000 Partnership Committee has been working on incorporating provisions of the 2000 International Building Code into the California Building Code. The Committee on SB 1953 developed a series of proposed amendments and clarifications and co-sponsored two implementation seminars with OSHPD. Mr. Martin noted the HBSB's subcommittee on the FREER manual developed provisions to expedite field review and exempt certain projects from review. The subcommittee also developed preapproved standard details for nonstructural components.

Mr. Martin said the HBSB has a Multi-Discipline Committee with subcommittees devoted to architectural and inspection issues, mechanical/electrical/plumbing/fire and life safety issues, and structural/geotechnical issues. He reported that these committees have been working on revisions to the FREER manual, criteria for exempting projects from review, standards for emergency generations, egress illumination, transfer switches, surgery and dialysis clinics, and the peer review process.

Mr. Martin noted the HBSB also established some ad hoc committees to focus on specific issues. The Ad Hoc Committee on Land Use addressed hospital siting issues and disseminated a white

paper describing their findings. The Ad Hoc Committee on Surgical and Dialysis Clinics has been working to clarify and streamline OSHPD 3 regulations and the application process.

Mr. Martin said the overall highlights of the HBSB's activities in 2000 were the SB 1953 seminars, Code 2000 work, and clarifications regarding clinics. He noted OSHPD issues code application notices (CANs) and policy intent notices (PINs) to disseminate these interpretations to the field. He welcomed questions and comments from the Seismic Safety Commission.

Commissioner Shapiro asked about the status of the 2000 International Building Code.

Commissioner Adelman explained that the California Building Standards Commission decided not to adopt the 2000 International Building Code. Instead, California will be using the 1997 Uniform Building Code, the 2000 Uniform Plumbing Code and Uniform Mechanical Code, and the 1999 NPC. Commissioner Shapiro asked if the Hospital Building Safety Board makes recommendations to OSHPD regarding which code to enforce. Mr. Martin responded that the HBSB only advises OSHPD on specific issues referred to the Board.

Commissioner Chang noted the annual report indicates a number of meetings were canceled due to insufficient funding, and he asked about the reason for this problem. Mr. Martin responded that the HBSB experienced a one-time problem with its appropriation last year, so meetings were canceled due to problems obtaining cost reimbursements. He added that this funding situation has now been resolved and the HBSB is functioning normally.

Chairman Clark asked about the relationship between the HBSB and OSHPD in terms of reviewing and evaluating the engineering reports submitted by hospitals. Mr. Martin said OSHPD refers specific issues to the HBSB Committee on SB 1953, and HBSB makes recommendations to OSHPD. He clarified that the HBSB has not looked at the submittals. Commissioner Adelman clarified that the HBSB has an advisory role only.

Commissioner Chang asked about the criteria used to identify hospitals as potential instrumentation sites. Mr. Martin responded that the criteria entail a number of factors, including geographical distribution throughout the state, type of building, and near-fault proximity. Commissioner Patwardhan asked if these factors are taken into consideration in land use planning and inquired as to the extent of new hospital construction in the state. Mr. Martin said California is seeing a fair amount of hospital construction because SB 1953 promotes both new construction and retrofit of existing sites. He added that the primary goal of the HBSB's Ad Hoc Committee on Land Use was to provide guidance in avoiding sites prone to heavy damage.

Commissioner Shapiro noted the HBSB also has an appeals function, and he asked if the volume of appeals is expected to increase because of SB 1953 deadlines. Mr. Martin explained that the HBSB hears technical appeals only, and none were heard in 2000. He said all appeals are first heard by a subcommittee, and then by the full Board if necessary. He added it was uncertain as to whether SB 1953 will result in more technical appeals.

Chairman Clark thanked Mr. Martin for the report.

# VIII. PRE-1973 HOSPITAL BUILDINGS WORKSHOP (Continued)

### **Summary of Progress Implementing SB 1953**

Ms. Susan Botelho, Office of Statewide Health Planning and Development, gave a brief overview of SB 1953 its current implementation status. She explained that SB 1953 requires hospitals to eliminate or retrofit old buildings that are expected to perform poorly in earthquakes and jeopardize life safety. In addition, it requires hospital to work to achieve post-earthquake functionality levels by 2030. Ms. Botelho said the first phase of implementing SB 1953 involved

evaluating the existing inventory of hospital buildings; the second phase would be retrofitting to improve seismic safety. In response to specific questions and concerns, OSHPD adopted emergency regulations in 2000 to clarify how SB 1953's provisions would be interpreted and enforced. Ms. Botelho noted OSHPD decided to postpone anchoring and bracing requirements, and compliance costs were mitigated by enacting lesser requirements for an estimated 450 buildings seeking to upgrade from SPC-1 to SPC-2 rankings.

Ms. Botelho said three bills enacted last year also made changes to SB 1953 requirements. SB 1801 gave hospitals five more years to comply with SPC-2 for buildings housing basic services; SB 2006 extended the 2008 deadline to 2030 to reach NPC-3 for certain hospitals in Zone 3 with ground motions less than .25g; and AB 2194 established a procedure for obtaining interim waivers. Ms. Botelho noted this year's budget bill also contains a provision requiring hospitals with SPC-1 buildings to report to OSHPD on their numbers of beds and types of services.

Ms. Botelho discussed OSHPD's review and approval program for hospital retrofit and construction projects. As required by SB 1953, all California hospitals had to submit engineering evaluations of their facilities by January 1, 2001. OSHPD received responses from all but 38 hospitals in the state. Of the reporting hospitals, 975 have SPC-1 buildings. Ms. Botelho said there were 807 reports of NPC-1's and 430 NPC-2's. She noted January 1, 2002, is the deadline for retrofitting to the NPC-2 level.

Ms. Botelho commented that significant progress has been made so far. The OSHPD staff is in the process of reviewing and "triaging" the evaluations received so far. Ms. Botelho recommended gathering more information and developing a compliance plan before passing any new legislation.

Commissioner Chang noted cost was the impetus for SB 1801, which provided five-year

deadline extensions. He recommended undertaking a prioritization study to identify the most vulnerable hospitals in the state so they can be strengthened first. He also supported state financial assistance to help hospitals get the work done. Ms. Botelho said OSHPD has not yet proposed additional prioritization. She emphasized that all SPC-1 buildings are collapse hazards and pose significant risks to the public.

Commissioner Klein asked how hospital users can find out the ratings for particular facilities.

Ms. Botelho said hospitals are required to report information to OES, and the ratings are also posted on the OSHPD Web site. She added the Web site does not have more detailed statistics on the number of beds or types of services.

Chairman Clark thanked Ms. Botelho for her report.

## **Perspectives of the Healthcare Industry**

Mr. Roger Richter, California Healthcare Association, explained that the California Healthcare Association and the 500 hospitals in California it represents support the intent of SB 1953. He noted that after the 1994 Northridge earthquake, Senator Tom Hayden introduced a bill that required all hospitals to fully comply with the Hospital Seismic Safety Act by 2005. That deadline was later extended to 2010 due to opposition from the hospital industry based on claims of high costs. Senator Alquist's SB 1953, developed out of discussions dating back to the mid-1980's, was an attempt to find a responsible and easily implemented way to achieve the state's seismic safety goals. It required the state to perform a survey of all hospitals, and it required hospitals to substantially comply with Milestone 4 requirements by 2020. In addition, SB 1953 recognized the need to ensure the seismic safety of nonstructural components, and it added an interim deadline of 2008 to achieve live safety standards.

Mr. Richter noted that little has been done in the four years since SB 1953, primarily due to the high costs of compliance, estimated by some in the industry as \$14 billion. Many hospital owners concluded it would not be practical to bring 40-year and older facilities into compliance, and additional time would be needed to complete construction of new facilities. The 2008 deadline has been extended to 2013 for hospitals meeting certain conditions, and full compliance has been postponed to 2030. Mr. Richter explained that high costs are due to a number of factors, including ADA upgrades, new technology, and nonstructural improvements. He added that the situation is exacerbated because SB 1953 comes at a time when many California hospitals are facing financial conditions that jeopardize their viability.

Mr. Richter said that in spite of these challenges, some hospitals are on schedule with the SB 1953 retrofit projects and will be able to meet the 2008 deadline. Some will need additional sources of funding and more time; others will need to close their existing facilities and rebuild new ones. On the other hand, some hospitals are so financially strapped they are unable to afford to have their buildings evaluated. Mr. Richter predicted that many hospitals will eventually be closed, but these prospects will not be disclosed in their compliance plans due January 1, 2002. He said the hospital industry supports the goal of seismic safety but has concerns about the effect of hospital closures on the public. He noted a multi-faceted solution is needed to resolve the situation in a way that is satisfactory for the hospital industry, the state, and California consumers.

Commissioner Klein asked what percentage of hospitals will be able to meet the 2008 deadline.

Mr. Richter responded that the numbers are not yet available.

Chairman Clark thanked Mr. Richter for his presentation.

Mr. Thomas Heller, Vice President, National Facility Services, Kaiser Permanente, said Kaiser

owns 28 hospitals in California with over 6,000 licensed beds. Kaiser has identified 13 hospitals that need significant work to comply with SB 1953, and in many cases rebuilding makes more sense than retrofitting. Mr. Heller noted that some retrofits cost more than 50 percent of the cost to rebuild, and the necessary construction would entail considerable disruption to hospital operations. He recommended giving hospitals a five-year extension in the 2008 deadline.

Commissioner Shapiro asked if Kaiser facilities would be able to meet the 2030 standard by 2013 if the 2008 deadline is abolished. Mr. Heller responded that the 2030 standard could be achieved with a five-year deadline extension. Commissioner Shapiro raised the possibility of considering hospital-specific deadlines rather than a blanket extension. Mr. Heller responded that Kaiser needs to integrate its construction projects with other Kaiser facilities. He emphasized the importance of providing an acceptable level of healthcare coverage in affected communities as well.

Commissioner Adelman asked how average retrofit costs compare with new construction costs. Mr. Heller responded that costs vary considerably, and each retrofit design is specific to an individual hospital. He added that Kaiser was in the process of designing four new facilities, and he offered to provide information on their costs. He estimated 1800 to 1900 square feet are needed per hospital bed, and each hospital bed costs approximately \$1.2 million. Commissioner Adelman noted new hospitals typically cost about \$600 per square foot.

Chairman Clark asked if there are any trends in hospital services that suggest major layout changes in the future. Mr. Heller said hospital design has remained fairly consistent during the past ten years. He added that major changes occurred over the past thirty or forty years, however. He said the trend has been to provide larger patient rooms, more space for imaging technology and operating rooms, and greater flexibility. Mr. Heller expressed confidence that the facilities being designed today will be in reasonably good condition for the next few decades.

Chairman Clark thanked Mr. Heller for his remarks.

Dr. Elaine Batchlor, California Healthcare Foundation, reported that the California Healthcare Foundation undertook studies of the financial conditions of California hospitals and the costs of compliance with SB 1953. Based on the results of those studies, she identified three key policy issues facing California and the hospital industry: how to encourage hospitals to make needed repairs at a more rapid pace; the state's role in financing and planning to avoid hospital closures and gaps in community service; and the ideal number, kind, and distribution of hospital beds in California. Dr. Batchlor said the California Healthcare Foundation is eager to work with the Seismic Safety Commission and others to improve hospital quality and efficiency and develop standards of access for medical care.

Dr. Batchlor introduced Mr. Mark Harrison, Shattuck-Hammond, and Mr. Charles Meade, Rand Corporation, and invited them to discuss the results of their studies.

Mr. Harrison noted Shattuck-Hammond conducted a detailed study of the fiscal health of California hospitals, and he drew attention to the written report distributed to commissioners. He said the study shows California hospitals are operating in a more challenging fiscal environment than hospitals elsewhere in the U.S. Mr. Harrison noted the study found that median hospital operating margins in California have declined from 1.65 percent in 1995 to 0.33 percent in 1999; in the U.S. as a whole, operating margins declined from 2.8 percent to 0.4 percent, respectively. The credit quality of California hospitals is weaker than hospitals in other states, and that disparity is growing. In addition, growing numbers of California hospitals are facing shortfalls in capital. Although it was difficult to identify the most vulnerable hospitals, rural locations reported significant problems.

Mr. Harrison noted that the state needs to decide whether to work toward preventive solutions or let the market determine the fate of California hospitals. He observed that if the situation is left to market forces, the result is likely to be disruptions in service and impairment of access to medical care.

Mr. Meade discussed Rand Corporation's study of the estimated costs of SB 1953 compliance for California hospitals. He noted about 60 percent of California's hospital beds are housed in buildings rated collapse hazards, or SPC-1's. The study showed it would take about seven years of construction to replace the number of beds in these pre-1973 buildings, and cost estimates total \$41.1 billion to rebuild completely and install medical equipment. Mr. Meade pointed out that much of this cost can be attributed to modernization and normal replacement of these old buildings. He said new construction typically costs about \$220 per square foot, partial construction costs about \$130 per square foot, and the additional cost of seismic design represents about \$3 per square foot. If modernization costs are deducted from the \$41.1 billion estimate, the remaining costs attributed to seismic upgrade and SB 1953 compliance is probably within the range of \$5 billion to \$10 billion. Mr. Meade added that extending the 2008 retrofit deadline for hospitals helps decrease the overall cost of SB 1953 compliance.

Commissioner Adelman asked the presenters if they had any recommendations on the pending SB 1953 legislation. Dr. Batchlor said the California Healthcare Foundation recommends more planning and looking at the distribution of vulnerable hospitals throughout the state as a step in mitigating the impact of SB 1953 compliance.

Commissioner Gates asked who funded the Shattuck-Hammond and Rand studies. Dr. Batchlor responded that the Foundation funded the studies. She explained that the Foundation was created by Blue Cross during its conversion to a private, profit-making organization.

Commissioner Nishinaga welcomed specific recommendations and advice from the Foundation regarding viable solutions for the state and the hospital industry.

Chairman Clark observed that the Shattuck-Hammond study indicates that hospitals are already experiencing a financial crisis. He pointed out there are a number of cost factors that contribute to the situation in addition to the costs of SB 1953 compliance. Dr. Batchlor agreed that other factors and issues are involved in the overall fiscal health of California hospitals.

Chairman Clark commented that rate of constructing new hospitals in California has been low in recent years, and he asked if this trend is expected to continue in the future. Mr. Meade said the number of hospital beds in California declined 10 percent in the last six years. Mr. Hammond noted this is a product of demand and the current market, and a number of complex issues are involved. Dr. Batchlor added that the relative importance of in-patient care is declining, technological advances are occurring, and the population is aging. She recommended engaging in further studies to help better understand these needs and plan for the future.

Commissioner Manning thanked the presenters for their helpful information and perspectives.

Ms. Maura Kealey, Service Employees International Union (SEIU), expressed appreciation to the Seismic Safety Commission for holding this workshop. She said SEIU represents 450,000 workers in California, half of whom are working in hospitals. The SEIU has strong concerns about the prevalence of unsafe buildings. Ms. Kealey pointed out that this year marks the thirtieth anniversary of the Sylmar earthquake that caused significant damage to California hospitals. She noted hospitals would have 14 years after the Hospital Seismic Safety Act was passed to make needed repairs. For these reasons, she stated, the proposed deadline extensions are unacceptable to SEIU. Ms. Kealey recognized that there may be some circumstances warranting exceptions for specific hospitals who plan to make their facilities safer sooner, such

as those who are committed to meeting 2030 standards by 2013, but extensions should not be allowed for others.

Ms. Kealey identified three factors the state needs to consider in healthcare planning: the healthcare needs of communities, the level of seismic risk, and the financial capacity of hospitals. In addition, the state should consider use of public funding and other ways of easing the burdens on hospitals. In particular, Ms. Kealey noted, it might be possible to target small, rural hospitals and large urban hospitals as priorities. She stated SEIU's opposition to blanket extensions.

Commissioner Adelman thanked Ms. Kealey for presenting the employees' perspective on hospital seismic safety. He noted the Commission opposes SB 842, Senator Speier's proposed deadline extension, in its present form. He added that a measure establishing a funding assistance program would not be realistic this year.

Commissioner Manning expressed support for the SEIU and the employees it represents. He added that saving lives is a paramount importance, and these decisions should not be solely a question of money. He noted that in addition to jeopardizing the safety of employees, unsafe hospital buildings endanger firefighters who need to enter the structures in rescuer attempts. Commissioner Manning stated his opinion that the state cannot afford to delay needed retrofits any longer. He urged the hospital industry to become part of the solution.

### Regulatory Issues, Deadline Adjustment and Prioritization Issues

Mr. Chris Tokas, SB 1953 Program Manager, OSHPD, introduced his associate, Mr. John Gillengerten, OSHPD. Mr. Tokas explained that OSHPD uses an expanded and refined version of FEMA 178 as a basis for the seismic evaluations undertaken as part of SB 1953 compliance. He noted the regulations spell out three different methodologies that can be used, including rapid

assessment, detailed analysis, and alternative methodologies. These regulations take into account various factors such as ground motion, site geology, soils, and the configuration and strength of structures. Mr. Tokas added that the regulations can be modified and amended as new information and technologies become available.

Commissioner Adelman asked what seismic provisions are applicable to new hospital construction. Mr. Tokas responded that OSHPD uses the 1998 California Building Code (CBC), which, although based on the 1994 Uniform Building Code, is more advanced than the 1997 Uniform Building Code. He noted the 1998 CBC incorporates recent provisions on steel frame buildings, ground motion, and near-source effects. Commissioner Adelman expressed concern that hospitals under construction now will be out of date within ten years because the 1994 codes were based on outdated 1991 and 1992 technology. He emphasized the importance of making sure new hospitals are built to the latest standards.

Commissioner Adelman asked Mr. Tokas and Mr. Gillengerten their views on pending legislation to extend SB 1953 compliance deadlines. Mr. Gillengerten responded that OSHPD staff cannot comment on pending regulation. He said the staff believes it could further subdivide SPC-1 buildings in order to prioritize retrofit efforts, if such legislation is enacted. He added that OSHPD would not determine the priorities. Commissioner Patwardhan asked if OSHPD has looked at any prioritization schemes. Mr. Tokas stated OSHPD can only implement what the law allows, and the current mandate has a 2008 deadline.

Mr. Trailer Martin, Chairman, Hospital Building Safety Board, said the HBSB's main focus is on the progress and effectiveness of implementing SB 1953. He observed that the law has been effective so far in identifying deficiencies in the state's inventory of hospital buildings. Mr. Martin said the current regulations appear to be adequate, and the existing SB 1953 functions as an effective filter in weeding out problem buildings. He added that the HBSB could assist in

helping OSHPD prioritize SPC-1 buildings.

Mr. Martin expressed his opinion that the hospitals being constructed today are safe. He said he believed the 1997 UBC is not a significant improvement over the 1994 code. He added that all newly constructed buildings have performed well in recent earthquakes.

Mr. Chris Poland, Dekenkolb Engineers, chair of HBSB's SB 1953 Committee, observed that since the passage of SB 1953 in 1995, a number of large earthquakes have enhanced engineering understanding of building performance, and these lessons have resulted in new standards and guidelines for evaluating and rehabilitating older buildings. In addition, the California Division of Mines and Geology (CDMG) and U.S. Geological Survey (USGS) have published updated hazard maps. Mr. Poland said there is general consensus that hospitals need to address life safety issues first, and then work toward improving post-earthquake functionality. SB 1953 reflects these goals and imposes a 2008 deadline on the life safety upgrades.

Mr. Poland expressed his opinion that it would make sense to redefine the definition of safety that needs to be reached by 2008. He pointed out that no people were killed in hospitals in recent major earthquakes in California, and only 15 to 20 percent of the buildings ranked as SPC-1's are in his opinion likely to collapse. He suggested focusing on the most vulnerable buildings near major faults as the state's first priority. Mr. Poland emphasized the importance of recognizing the new retrofit standards and guidelines and incorporating them in regulations. He noted this approach will help achieve the strengthening the state needs while also minimizing costs.

Chairman Clark asked how the retrofit standards deal with the issue of zonation versus hazard maps. Mr. Poland noted the state uses zones developed in the 1970's and 1980's, but there has been a trend toward using contour maps beginning in the 1990's. He added that the 1997 UBC does not use contour maps, but the 2000 International Building Code does.

Chairman Clark asked whether major structural design changes are likely in the coming years.

Mr. Poland said he believed hospitals being constructed now will be useful for decades. He supported rehabilitating older hospitals as well, but suggested focusing on the minimum number of structures that are most vulnerable.

Mr. Michael Reichle, California Division of Mines and Geology, explained that CDMG reviews geological reports for new hospitals and retrofit projects in terms of their ground motion, slope analysis, foundation strength, and other factors. He noted the new hazard maps and current databases may help prioritize the most vulnerable buildings based on peak ground accelerations.

Chairman Clark commented that there have been substantial improvements in hazard mapping during the last decade, and he asked whether change is projected to occur at such a rapid pace in the future. Mr. Reichle responded that most improvements will be incremental during the next several years.

Commissioner Nishinaga noted that CDMG hazard maps are not used for site-specific analysis, although they should be incorporated in building codes. Mr. Reichle said the maps are intended for general analysis, and corrections need to be made for site-specific geology.

Mr. Roger Richter, California Healthcare Association, commended OSHPD for doing a good job interpreting and enforcing SB 1953's complex provisions. He noted OSHPD has been very receptive and open in developing its processes, and there have been few complaints about regulations.

Mr. Richter recommended corrective legislation to address two problems. First, he noted, many hospitals have concluded it would be more cost-effective to rebuild NPC-3 buildings than to

retrofit. Second, SPC-1 buildings could be subclassified to focus first on the most vulnerable.

Mr. Richter recommended not allowing deadline extensions for extremely hazardous buildings.

Mr. Richter commented that hospitals will need some kind of financial assistance in order to fully comply with SB 1953. He supported the SEIU's suggestion for allowing deadline extensions to 2013 for hospitals committed to meeting 2030 standards by that time. He emphasized the need to develop a multi-faceted solution based on priorities and needs.

Chairman Clark asked Mr. Richter to comment on the low rate of new hospital construction in recent years. Mr. Richter said the trend is largely due to the financial situation. He noted that 60 percent of California hospitals are losing money on operations, and a third are losing from all sources of income. He predicted that the number of hospital beds will continue to decline, and many hospitals will close. He cited the trend toward outpatient services and the nursing shortage as other key factors.

Commissioner Shapiro noted many hospitals self-declared SPC-1 buildings, and he asked what can be done to triage or accelerate their rate of repair. Mr. Richter said the budget bill contains language requiring hospitals to provide inventory on the number of beds and types of services in their SPC-1 buildings within 10 days. Knowing that information will help plan strategies and prioritization.

Commissioner Snyder commented that hospitals' future needs are largely driven by new technology and the managed care environment. She emphasized that seismic requirements are not a major driving factor.

Mr. Richter noted Commissioner Adelman had expressed concern about hospitals converting buildings to clinics. He noted that changing occupancies may trigger a requirement to bring

those buildings to current code. Commissioner Adelman said he hoped the codes would be interpreted that way. He pointed out the UCBC contains a possible loophole because downward occupancies do not trigger upgrading to current code. He added that he was aware of attempts by some hospitals to effect such conversions.

Commissioner Gates asked if California hospitals currently have excess bed capacity. Mr. Richter responded that it would be difficult to determine whether a surplus exists. He noted there is a difference between overall beds and licensed beds, and hospitals are also required to maintain a certain number of beds for staff and for emergencies. Commissioner Gates expressed his opinion that the current hospital fiscal crisis is due to oversupply of certain services, underuse of facilities, and bad management. Mr. Richter stated the primary cause is government underpayment for Medicare services.

Commissioner Nishinaga asked Mr. Richter if he agreed with the Rand study estimate that seismic design typically adds only about \$3 per square foot. Mr. Richter said projects generally take more time in California because of the OSHPD review process, so that additional cost needs to be factored in.

## **Public Comments**

Mr. Evan Reis, Comartin-Reis, noted his firm has expertise in quantifying earthquake risks to buildings. Focusing on SPC-1 hospital buildings, he noted there are different levels of seismicity that should be taken into account when prioritizing and considering deadline extensions. He said extending deadlines for SPC-1 buildings in low-seismicity areas could be done without jeopardizing public safety. He pointed out a SPC-1 building in a low-seismicity area like Sacramento might warrant different treatment than one in Oakland. Mr. Reis recommended that the state consider using an objective methodology, such as that available from his firm, to

develop a statewide profile as a basis for prioritization.

Commissioner Patwardhan observed that the impact on communities should also be taken into consideration. Commissioner Chang noted that soil, site conditions, and foundations should also be factored in. Mr. Reis said the Comartin-Reis model incorporates hazard maps and soil profiles. He added that the focus of his firm's existing model is life safety, and factors such as community needs are not included.

At 12:12 p.m., the meeting was recessed for lunch. Chairman Clark reconvened the meeting of the Seismic Safety Commission at 1:15 p.m.

# **Legislative Panel**

Senator Jackie Speier noted that in enacting SB 1953, the Legislature may have moved too hastily to achieve a difficult goal. She observed that the 2008 deadline is fourteen years after the law was passed, but the hospital industry has only a short remaining time frame in which to act. She said California needs to look at the larger picture and assess the impacts of SB 1953 on healthcare in the state. Senator Speier noted that the cost of complying with the 2008 deadline is estimated at \$10 billion overall, and it will cost \$24 billion to comply with the 2030 deadline. This comes at a time when 64 percent of California hospitals are already operating in the red. Senator Speier said industry observers estimate the additional cost of federal HIPA compliance at \$22 billion.

Senator Speier observed that risk of death in hospitals from earthquakes is far less than the risks of some other hazards that can be avoided. In particular, she noted approximately 700 people in California die each year from medication errors, and she suggested focusing limited funds on issues like this that affect more people.

Senator Speier explained that the purpose of her SB 842 is to extend the 2008 deadline for certain hospitals. She emphasized the bill is not yet in its final form, and expressed an interest in working with the Commission and others to make sure all concerns are addressed. Senator Speier recommended charging OSHPD to prioritize the SPC-1 buildings by next July. She welcomed suggestions and assistance from the Commission.

Senator Speier observed that Senator Dunn's SB 928 authorizes issuance of bonds to assist hospitals financially, but she questioned whether this expenditure was prudent in light of the state's fiscal crisis due to the energy shortage. She suggested limiting funding assistance only to SPC-1 high-priority buildings serving communities in places where no other healthcare is available.

Commissioner Snyder commented that SB 842 only addresses life safety, but not post-earthquake functionality issues. Senator Speier noted many hospitals will need to disrupt and relocate services during the retrofit and rebuilding process. She suggested using temporary mobile tents to house operating rooms, emergency rooms, and ICU functions as an alternative to space inside unsafe buildings.

Chairman Clark asked how the Seismic Safety Commission could help with SB 842. Senator Speier observed that there appears to be growing consensus that SPC-1 buildings should be prioritized, and she encouraged the Commission to suggest prioritization criteria. She added that seismic safety is a major concern, but the issue is how soon. She noted the danger of earthquakes needs to be balanced against the impact of facility closures on the communities they serve.

Commissioner Klein said he was sympathetic to the need for prioritization. He observed that the Rand study results indicate the incremental cost of seismic retrofit is minimal compared to the

overall costs of modernizing and rebuilding. He objected to providing subsidies to allow hospitals to rebuild to meet their current modernization needs rather than just their seismic safety needs. Senator Speier commented that the financial crisis in the healthcare industry involves factors other than the cost of construction. She noted pharmaceuticals and in-patient costs have risen faster than HMO's and capitation rates. Commissioner Klein pointed out that 63 percent of hospitals are operating at a deficit now, without the costs of seismic upgrades.

Commissioner Adelman said the threat of hospital closures poses a political issue for the state. He noted the average resident of California probably cares more about access to healthcare than earthquake risk. Senator Speier agreed that seismic safety is not a key issue for most voters. She expressed her belief that most people would opt to keep schools and hospitals open rather than have them closed or disrupted for retrofit work. She added that hospitals will probably not announce which facilities are closing until the 2008 deadline draws closer.

Commissioner Gates commented that at the time SB 1953 was enacted, the hospital industry expressed confidence the deadlines would be no problem. He said that in 1990, the Hospital Association asked members to undertake voluntary retrofits, but few did. He emphasized that the timeline for compliance cannot be left up to the hospital industry. Commissioner Gates asked Senator Speier if she accepted the Commission's proposed amendment to SB 842 adding progress timelines. Senator Speier said she would be happy to consider the Commission's suggestion. She added the state needs to prioritize the most perilous types of buildings and verify on tapes dates for those problems to be corrected.

Commissioner Patwardhan supported prioritization based on a set of accepted criteria. He noted SB 842 presently contains language requiring the owner to demonstrate "loss of capacity," and he expressed concern that hospitals may misuse that provision. He recommended rethinking making OSHPD responsible for prioritizing. Senator Speier noted OSHPD's role is to help

develop criteria and regulations consistent with the legislative intent.

Commissioner Manning said he learned from his background in fire service that public safety legislation passes more easily after a disastrous event. He noted the hospital industry and legislators agreed to the SB 1953 at the time the bill was enacted, but the pace of efforts have slackened in the intervening years between major seismic events. Commissioner Manning welcomed Senator Speier's ideas for encouraging compliance by incentives. Senator Speier said she liked Commissioner Gates' suggestion about progress timelines to ensure a reasonable pace. However, she noted, the state may have insufficient technical capacity to meet all its needs by 2008.

Commissioner Shapiro asked about the status of prioritization by OSHPD. Senator Speier said the current budget bill contains language requiring hospitals to provide information to OSHPD regarding the types of services and number of beds in SPC-1 buildings. OSHPD is now looking at ways of implementing that task when the budget passes.

Chairman Clark thanked Senator Speier for her remarks.

Mr. Kurt Schaefer, Deputy Director, OSHPD, explained that OSHPD is charged with writing the regulations and devising the implementation program for SB 1953. The first task since the bill's passage in 1994 was to stake stock of the existing hospital building inventory in the state, and in that process, OSHPD has identified approximately 800 buildings of concern. Mr. Schaefer noted 975 SPC-1 buildings were reported as of January 1, 2001. He said the issue facing the state now is what to do about the known SPC-1's. He observed that one option would be not to use those buildings for acute-care services rather than have them replaced or retrofitted.

Mr. Schaefer said the Hospital Building Safety Board is OSHPD's main advisory vehicle, but he

welcomed additional suggestions and comments from the Seismic Safety Commission.

Mr. McCarthy asked what the Commission can do to improve communications with OSHPD. Mr. Schaefer responded that the relationship is already improving, and there is more staff interaction going on. Mr. McCarthy invited Mr. Schaefer to call on him for assistance.

Commissioner Shapiro asked about OSHPD's role in whatever prioritization process takes place for SPC-1 buildings. Mr. Schaefer said OSHPD will take advantage of the expertise available from the Hospital Building Safety Board and its consulting members. He noted community capacity and other economic factors will be considered as well. Mr. Schaefer observed that one possible outcome might be to assign staggered deadlines in two- or three-year intervals for various classifications of buildings. He expressed confidence that OSHPD will be able to develop a prioritization system based on sound criteria by July of 2002. OSHPD needs the authority to adopt emergency regulations to expedite these refinements.

Commissioner Adelman commented that there is a good working relationship between the Hospital Building Safety Board and OSHPD staff. He noted Mr. Fred Turner and Mr. Henry Reyes frequently attend HBSB meetings. He praised OSHPD for its exceptional performance and offered the Commission's assistance and support.

Chairman Clark thanked Mr. Schaefer for his comments.

#### IX. DEVELOPMENT OF ISSUES AND POLICY RECOMMENDATIONS

Chairman Clark noted the end result of the Commission's workshop and study will be a white paper making policy recommendations. He suggested establishing an ad hoc committee to begin working with the staff to compile these findings. Chairman Clark noted there is a time constraint

because SB 842 is scheduled for hearings in mid-August. He suggested that the Legislative Committee and ad hoc committee meet in early August so a draft document can be taken public before September.

Chairman Clark proposed that he and Commissioners Church, Gates, and Shapiro serve on the ad hoc committee. He noted the Legislative Committee consists of Commissioners Gates, Shapiro, and Patwardhan. Commissioner Adelman requested that his name be added to the mailing list for the minutes of both committees.

ACTION: Commissioner Gates made a motion, seconded by Commissioner Manning, that:

The Commission direct its Legislative Committee and Ad Hoc SB 1953 Committee to work together to develop a draft findings document before the September meeting.

\* Motion carried, 10 - 0 (Commissioners Gates, Mochizuki and Moy absent during voting).

Commissioner Shapiro encouraged fellow commissioners to express their reactions to the information presented by the guest speakers.

Commissioner Klein expressed support for prioritization and establishing measurable progress milestone. He noted hospitals seeking deadline extensions should be required to meet a higher standard, and the state should make sure there is at least one functioning hospital in every area.

Commissioner Nishinaga commented that earthquakes evoke emotional and psychological responses from many. He noted people have a tendency to forget about these hazards in the years between major events.

Commissioner Manning suggested focusing more on incentives than on penalties and coercion. He noted people in fire service heard similar threats of closures and dire financial consequences when requirements were first imposed for fire sprinklers, fire-retardant roofs, and smoke detectors. Instead of reacting to this crisis language, he recommended giving the hospital industry a "gentle push" to make sure they get their seismic safety work done in a reasonable time. He advocated taking smaller steps as a way of getting to a longer-term goal.

Commissioner Snyder pointed out that the basic legislative intent of SB 1953 is to ensure life safety and post-earthquake functionality, and she recommended keeping those dual goals in mind. She noted patients in hospitals tend to be sicker now, posing a greater burden for hospitals and their staffs. Although there have been no earthquake-related deaths in hospitals since 1941, the patients and staff need to be protected. Commissioner Snyder supported an approach like the Field Act for public schools.

Commissioner Snyder observed that lessons learned from the 1971 San Fernando earthquake, and later in Coalinga, Whittier Narrows, and Loma Prieta repeat the same themes. She strongly recommended that the state take steps to protect the safety of its most vulnerable constituents. She observed that the measure of California's success should be its ability to care for its patients and staffs, and this entails a level of seismic safety beyond just preventing collapse.

Commissioner Snyder noted 18 hospitals were closed after the Northridge earthquake, so lots of work still needs to be done to do an adequate job of assuring seismic safety.

Commissioner Gates supported the concept of prioritization.

Commissioner Gates thanked Commissioners Johnson, Haggerty, Chang, Snyder, and Manning for their service on the Commission, and he said he enjoyed working with each of them. He

asked the staff to keep these outgoing commissioners on the email list and mailing list so they can provide their valuable input on the proposed findings.

Assemblywoman Ellen Corbett discussed her plans for legislation in the current session. She noted the Select Committee on Earthquake Preparedness, a body she chairs, will conduct three hearings during the fall, including one on hospital issues.

Assemblywoman Corbett noted AB 1118, to provide retrofit grants and loans, was amended to remove the tax credit, and the bill eventually was placed on suspense. AB 724, regarding school preparedness, also became a two-year bill. Assemblywoman Corbett said she would try to push these pieces of legislation next year. She thanked the Commission for its support.

Chairman Clark thanked Assemblywoman Corbett for her remarks.

Chairman Clark welcomed more comments and thoughts from commissioners. He also invited commissioners to submit written comments.

Commissioner Klein suggested that the Commission include in its findings the point made by the Rand study that a large percentage of the costs can be attributed to modernization, while seismic upgrades constitute a small percentage.

Commissioner Nishinaga asked that commissioners be provided with copies of the Rand study. Chairman Clark noted copies are available upon request. He asked the staff to follow up.

Commissioner Patwardhan noted the Commission should address incentives and financing issues in the findings. Commissioner Manning observed that the use of bonds and public funds is an important issue. Rather than setting a dangerous precedent, he noted, it might be better to

develop a system of incentives. He recommended proceeding cautiously so appropriate legislation can be designed.

### X. LEGISLATIVE UPDATE

Director of Legislation Henry Sepulveda reported that four of the seven Commission-sponsored bills are moving forward, while three have become two-year bills. He noted SB 629 (Alarcon), regarding the storage rack study, SB 998 (Alarcon), mandating a statewide disaster recovery plan, and AB 724, regarding school preparedness, have been held in suspense, as have all bills with potential fiscal impacts.

Mr. Sepulveda said he and Mr. McCarthy testified the previous week at a hearing on AB 977 (Alquist), a bill to replenish the Commission's earthquake investigations account. He reported the bill has been held up pending resolution of some concerns raised by committee members. He said the Department of Finance objected that the appropriations should go through the regular budget process, although Commission representatives tried to explain that the investigations account needs to be funded in advance so it is in place when emergencies occur. Mr. Sepulveda noted the regular budget process could take as long as 18 months.

Mr. Sepulveda said AB 184 (Liu), making a technical correction pertaining to tax exemptions, is moving forward and anticipated to pass to the Senate. AB 1118 was amended, and the tax credit provisions were removed. Mr. Sepulveda noted AB 1118 still has the grants and loan program, but funding needs to come from a source other than the general fund. He said this bill was placed on suspense.

Mr. Sepulveda reported that SB 717 (Speier), a seismic retrofit bond bill, is expected to move forward.

Mr. Sepulveda said he expected no closure on the budget until later in July.

Chairman Clark observed that AB 656 (Chan), the bill granting an extension in deadlines for specific Alameda County hospitals, is likely to pass on consent. Mr. Sepulveda noted the Commission adopted a "support" position on AB 656.

Ms. Susan Botelho, OSHPD, asked about the technical corrections made by AB 184 (Liu). Mr. Sepulveda explained that the reference to a nonexistent code section was corrected. Ms. Botelho pointed out that the Uniform Building Code is not equivalent to Title 24, and she recommended deletion of the reference to the UBC. Mr. Sepulveda said the staff will propose that amendment to the author.

### XI. MISCELLANEOUS

Chairman Clark reported that he attended a meeting chaired by Mr. Chris Poland to implement the California Integrated Seismic Network. He noted the Commission's support was helpful in obtaining a \$6.8 million funding allocation for upgrades.

### XII. GOOD OF THE MEETING

Commissioner Nishinaga thanked the outgoing commissioners for their support and assistance. He expressed special appreciation to former Chairman Manning for his dedicated service on the Seismic Safety Commission. Chairman Clark said the Commission will miss the retiring commissioners, and he wished them well.

### XIII. ADJOURN

There being no further business, Commissioner Adelman made a motion, seconded by Commissioner Patwardhan, that the meeting be adjourned. The Commission meeting was adjourned at 2:55 p.m.

Approved by:

Richard McCarthy

**Executive Director**